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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,604	05/18/2004	Jui-Chiang Lin	LITP0026USA	3603

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EXAMINER

KAYRISH, MATTHEW

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/709,604	LIN, JUI-CHIANG	
	Examiner	Art Unit	
	Matthew G. Kayrish	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-4, 7 and 8 have been considered but are moot in view of the new ground(s) of rejection. Claims 5 and 6 have been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi (Japanese Publication Number JP2003187510A), in view of Kwon (US Patent Number 6584064).

Regarding claim 1, Kishi discloses:

A floating-type clamping mechanism for use in an optical disk drive comprising:

A clamping body (figure 2, item 8);

A clamping yoke comprising a first central hole (figure 2, item 5);

A central clamping element (figure 2, item 6) comprising a prominent part (figure 2, item 6c);

A magnetic element (figure 2, item 7) attracted to the clamping yoke (paragraph 26) and comprising a second central hole (figure 2, item 7 is ring shaped), wherein the prominent part passes through the second central hole (figure 2, item 6c passes through the magnet) and the central clamping element is clamped by the clamping yoke and the magnetic element (figure 4, items 5 & 7 will clamp 6 when in the fully clamped position); and

An elastic element (figure 2, item 9), wherein two ends of the elastic element are fixed to the clamping body (figure 2, one end of item 9 is connected to item 8) and the clamping yoke respectively (figure 2, one end of item 7 is connected to item 5).

Kishi fails to disclose:

A plurality of elastic elements, wherein two ends of each elastic element are fixed to the clamping body and the clamping yoke respectively.

Kwon discloses:

A clamping body (figure 3, item 54);

A clamping yoke (figure 3, item 58b);

A central clamping element (figure 3, item 58a);

A plurality of elastic elements (figure 3, item 54b), wherein two ends of each elastic element are fixed to the clamping body (figure 4, one end of item 54b is connected to item 58 near item 58b) and the clamping yoke respectively (figure 4, one end of item 54b is integral with item 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of elastic elements to ensure that the yoke is positioned securely to the clamping body, thereby holding it in the proper position. Furthermore, the use of a plurality of elastic elements in a symmetric manner about the axis of rotation ensures that the clasper will be centered on the disc to be clamped.

Regarding claim 2, Kishi, in view of Kwon discloses:

The floating-type clamping mechanism of claim 1 wherein the magnetic element is a magnet (item 7 is a magnet).

Regarding claim 3, Kishi fails to disclose:

The floating-type clamping mechanism of claim 1, further comprising;

Wherein the clamping yoke further comprises a plurality of connecting holes and the clamping body comprises a plurality of connecting holes positioned correspondingly to the plurality of connecting holes of the clamping yoke and the plurality of elastic elements are connected to the plurality of connecting holes of the clamping yoke and the plurality of connecting holes of the clamping body.

Kwon discloses:

A floating-type clamping mechanism, wherein the clamping yoke further comprises a plurality of connecting holes (figure 3, item 56c) and the clamping body comprises a plurality of connecting holes (figure 3, hooks [54b] lie within holes on 54) positioned correspondingly to the plurality of connecting holes of the clamping yoke and the plurality of elastic elements are connected to the plurality

of connecting holes of the clamping yoke and the plurality of connecting holes of the clamping body (column 3, lines 48-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the clamping body and clamping yokes with holes for the elastic members to be positioned, as taught by Kwon, because the corresponding positioning holes on each of the clamping yoke and the clamping body will allow for a proper fit so that each can be press fit together. This will ensure that each of the parts fits together properly, thereby causing a secure fit for the clamping yoke to the clamping body.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi, in view of Kwon, in further view of Kenmotsu (US Patent Number 5050159).

Regarding claim 4, Kishi, in view of Kwon fail to disclose:

The floating-type clamping mechanism, wherein when an optical disk is loaded into the optical disk drive, the magnetic element of the floating-type clamping mechanism attracts a magnetic element on a turntable of the optical disk drive for fixing the optical disk, and when the optical disk is ejected from the optical disk drive, the magnetic element of the floating-type clamping mechanism separates from the magnetic element on the turntable of the optical disk drive and the magnetic element of the floating-type clamping mechanism separates from the clamping body by the elastic force of the plurality of elastic elements.

Kenmotsu disclose:

A floating-type clamping mechanism wherein when an optical disk is loaded into the optical disk drive, the magnetic element of the floating-type clamping mechanism attracts a magnetic element on a turntable of the optical disk drive for fixing the optical disk (columns 5 & 6, lines 63-68 & 1-5), and when the optical disk is ejected from the optical disk drive, the magnetic element of the floating-type clamping mechanism separates from the magnetic element on the turntable of the optical disk drive and the magnetic element of the floating-type clamping mechanism separates from the clamping body by the elastic force of the plurality of elastic elements (column 5, lines 52-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Kishi with elastic elements use their elastic force to release the disc, as taught by Kenmotsu. Furthermore, to provide Kishi a clamp, which performs as the clamp of Kenmotsu, during ejection will save on the amount of power needed to perform the ejection. The elastic elements use a pressing means to release the disc temporarily; this temporary release can be used as a means to eject because this will save on power and will help reduce the size of the clamp, because the clamp release mechanism is provided as part of the clamping yoke and the clamping body.

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmotsu, in view of Kishi.

Regarding claim 7, Kenmotsu discloses:

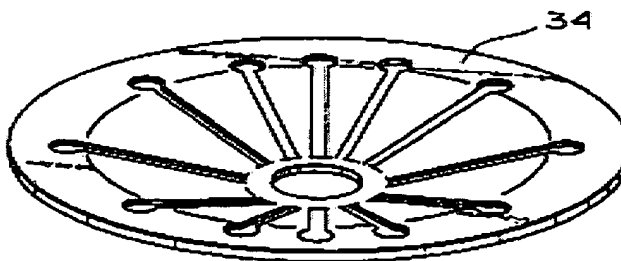
A floating-type clamping mechanism for use in an optical disk drive comprising:

An element (figure 7, item 33);

A clamping yoke (figure 7, item 36); and

A clamping body (figure 7, item 35) comprising a central clamping element (figure 9, inner ring of item 34, see below) and a plurality of cantilevers (figure 9, leaf springs of item 34, see below), wherein the cantilevers are stretched from the clamping body (figure 7, outer ring of item 34 connects to item 35) and connected to the central clamping element (figure 7, inner ring of item 34, see below);

Wherein the central clamping element is clamped between the element and clamping yoke (figure 7, the center ring of item 34 is clamped between items 33 & 36).



Kenmotsu fails to disclose:

A floating-type clamping mechanism for use in an optical disk drive comprising:

A magnetic element (figure 4, item 20);

A clamping yoke attracted to the magnetic element; and

Wherein the central clamping element is clamped between the magnetic element and clamping yoke.

Kishi discloses:

A floating-type clamping mechanism for use in an optical disk drive comprising:

A magnetic element (figure 2, item 7);

A clamping yoke (figure 2, item 5) attracted to the magnetic element (paragraph 19); and

A clamping body (figure 2, item 8) comprising a central clamping element (figure 2, item 6 & item 8 are connected in the relaxed state);

Wherein the central clamping element is clamped between the magnetic element and clamping yoke (figure 4, items 5 & 7 will clamp 6 when in the fully clamped position).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Kenmotsu with a magnetic element in his floating clamping device, as taught by Kishi, because using magnetic elements in disc drives to clamp discs is well known in the art. Furthermore, the magnetic force caused by the magnetic, in the case of Kishi, is used in combination with the force of the elastic member to provide a tight clamp on the disc. Therefore, it would be obvious to use the magnet in the clamp to provide a tight clamp on the disc so the disc is securely in place on the turntable. Kishi further notes this in paragraph 19.

Claim 8 is rejected for the same reasons noted in claim 4 above.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

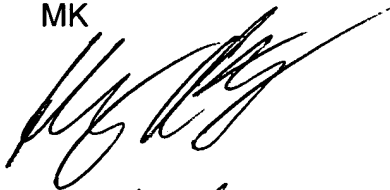

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew G. Kayrish

8/24/2006

MK


8/24/06
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